

Course on basic immunology (spring 2018)

General description: An elective course of basic immunology including some methodological and clinical aspects.

Eligibility: Students in medicine, dentistry, biochemistry, biology, biomedicine, and in biomedical imaging and drug discovery -programs (and students with other similar background). PhD -students of doctoral programs.

Course description: Lectures (15, 1h each). Short essay on a topic selected by course leaders.

ECTS points: 2 (two) ECTS points (for graduate students of medicine, dentistry and biomedicine, postgraduate studies related to doctoral programs). Students from faculties other than medical faculty and ÅA students are advised to check themselves that ECTS points are accepted for their curriculum.

Time and place: Spring 2018 (March-April), lectures on Tuesdays and Thursdays at 15.00. Place: ICT beta and ICT lambda (as specified for each lecture below).

Course leaders: Arno Hänninen and Marko Salmi

Lectures (15:00 – 16:00)

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| 1.3. ICT lambda | Introduction of the course (Course leaders) |
| 6.3. ICT lambda | Flow cytometry and cell sorting in immune cell analyses (Jouko Sandholm) |
| 8.3. ICT beta | Innate immunity 1: Complement and its functions (Jukka Hytönen) |
| 13.3. ICT lambda | Innate immunity 2: Myeloid leukocytes, pattern recognition (Maija Hollmen) |
| 20.3. ICT lambda | B-cells and humoral immunity (Jukka Alinikula) |
| 22.3. ICT lambda | B-cell effector mechanisms and therapeutic antibodies (Pieta Mattila) |
| 27.3. ICT lambda | Antigen presentation and HLA/MHC (Jorma Ilonen) |
| 3.4. ICT lambda | T lymphocytes (Ubaid Ullah) |
| 5.4. ICT lambda | Cytokines and their functions in innate and adaptive immunity (Zhi Chen) |
| 10.4. ICT lambda | Leukocyte trafficking and inflammatory reaction (TBA) |

12.4. ICT lambda	Immunological tolerance (Raine Toivonen)
17.4. ICT lambda	Autoimmune diseases (Marika Karikoski)
19.4. ICT lambda	Immunity in microbial infections and vaccine immunology (Ilkka Julkunen)
24.4. ICT lambda	Cancer immunology (Marko Salmi)
26.4. ICT beta	Diagnostic algorithms in autoimmune diseases and immune deficiency (Arno Hänninen)

Essays

Each participant will write a short essay from a topic given by the teachers.

Feedback and evaluation of the course

Approval of essays and course evaluation takes place as an interactive course in Moodle space.